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WATER SUPPLY OUTLOOK FOR MONTANA

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

UNITED STATES DEPARTMENT of AGRICULTURE···SOIL CONSERVATION SERVICE,
and
MONTANA AGRICULTURAL EXPERIMENT STATION

Data included in this report were obtained by the agencies named above in cooperation with Federal, State, and private organizations listed on the inside back cover of this report.

AS OF
MAR. 1, 1969

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1400 snow courses in Western United States and in the Columbia Basin in British Columbia. In the near future, it is anticipated that automatic snow water equivalent sensing devices along with radio telemetry will provide a continuous record of snow water equivalent at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85205
Colorado (N. Mex.)	12417 Federal Building, Denver, Colorado 80521
Idaho	P. O. Box 38, Boise, Idaho 83707
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Building, Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 340, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

U. S. DEPARTMENT of AGRICULTURE
CONSERVATION OF WATER BEGINS WITH THE SNOW SURVEY
SOIL CONSERVATION SERVICE

WATER SUPPLY OUTLOOK FOR MONTANA

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

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MONTANA WATER SUPPLY OUTLOOK
March 1, 1969

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* * * * * * * * * * * * * * * * * * * * * * * * * * *
*                                                   *
* Mountain snow pack is above average in most areas *
* of Montana.  Snow pack is record and near record  *
* in headwaters of the Beaverhead and Madison       *
* Rivers.  Snow cover is near average in headwaters *
* of the Kootenai, Musselshell, Shields, Sun,       *
* Marias and Dearborn Rivers.                       *
*                                                   *
* Moisture in soils under the snow is near or above *
* average.                                          *
*                                                   *
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COLUMBIA RIVER DRAINAGE

Snow - The mountain snow pack is above average and more than last year in all portions of the Columbia River drainage in Montana. The Bitterroot is lowest with 116 percent average, while snow cover is 132 percent average in the upper Clark Fork basin. Other areas are 20 to 25 percent more than the 1953-67 average. Snow cover is heavy in the lower elevation headwaters of Fisher, Whitefish, Stillwater, Little Bitterroot and Thompson Rivers. In all areas there is a significant amount of low elevation snow.

Soil moisture under the snow is generally wetter than normal and will help increase runoff from the snow pack.

Streamflow - Most streams are forecast to flow 20 to 25 percent above average for the spring and summer period. Higher percentage flows are expected on the Fisher, Whitefish, Stillwater, Little Bitterroot, Thompson and St. Regis Rivers. These streams have low elevation headwaters and will have a large early runoff. Flathead River tributaries are somewhat lower, reflecting effects of the high elevation snow pack which is 5 to 15 percent above average.

Late season irrigation supplies are expected to be near or above average in all irrigated areas.

MISSOURI RIVER DRAINAGE

Snow - There is considerable variation in the mountain snow pack east of the divide. Snow pack is record high in the Red Rock River headwaters along the Montana-Idaho border. Near record measurements were made in the Madison River headwaters. The remainder of Missouri River headwaters has above average snow cover. The Musselshell, Sun, Teton and Marias Rivers have near average mountain snow pack.

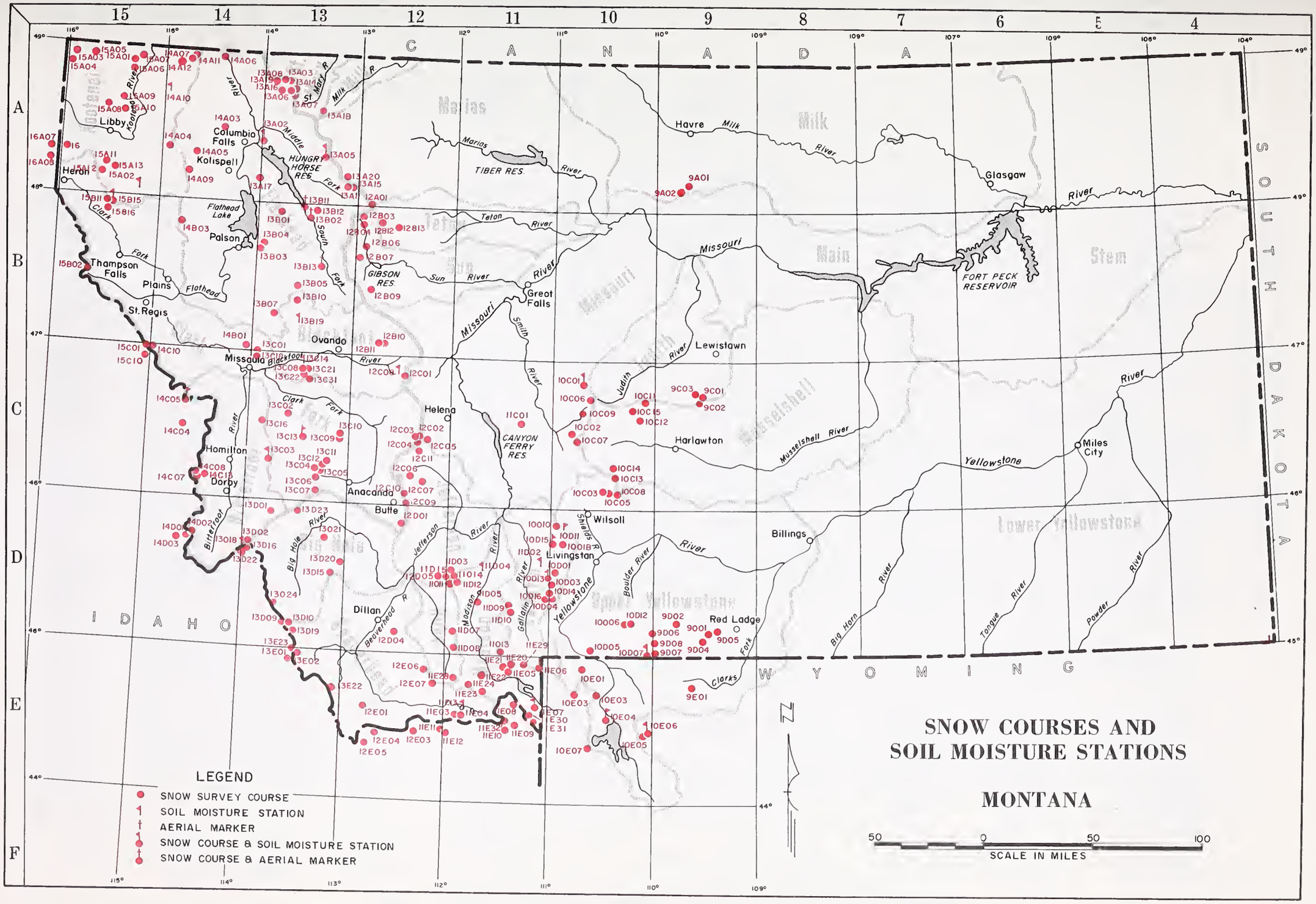
Streamflow - Forecasted flow of the Red Rock River exceeds the maximum volume measured in 1965 and represents the highest flow in the last 30 years. Madison River forecasts represents volume about the same as previous maximums in 1965 and 1943. With the abundance of low elvation snow cover in the Missouri headwaters, it is probable there will be two peak runoff periods this year. The first from low elevation melt and the normal peak flow from mountain snow melt. Most areas will have more runoff this year - the exception is the Gallatin River drainages which produced near record runoff in 1968.

Downstream tributaries to the Missouri with less mountain snow cover are forecast to have near average runoff. Late season irrigation supplies are expected to be near to above average.

YELLOWSTONE RIVER DRAINAGE

Snow - In the Yellowstone River headwaters above the Big Horn, water contained in the mountain snow pack is a little less than last year and 117 percent of the 1953-67 average. The Big Horn River and its tributaries in Wyoming has 87 percent of last year and 91 percent average snow cover. The Little Big Horn drainage in Montana and Wyoming has 68 percent of last year and 84 percent average snow pack.

Streamflow - Forecasts of spring and summer runoff is generally 5 to 15 percent above average for Yellowstone River tributaries, near average on the Big Horn River and about 10 percent below average on the Little Big Horn drainage.



U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE
WASHINGTON, D.C. 1963 M-4473

INDEX to MONTANA SNOW COURSES and SOIL MOISTURE STATIONS

SNOW COURSES

COLUMBIA RIVER BASIN

Drainage Basin & Course Name	Number	Elev.	Sec.	Twp.	Range	Record Began	Measuring Dates 1/	Meas. By 2/
KOOTENAI RIVER								
Bald Eagle Peak	15A11	5700	6	27N	31W	1969	3,4,5	1
Basfield Mountain	15A08	5600	4	32N	30W	1969	1,2,3,4,5,5½,6	1
Baree Creek	15B11	5500	36	26N	31W	1956	3,4,5,5½	2
Baree Midway	15B16	4600	31	26N	30W	1965	3,4,5,5½	2
Baree Trail	15B15	3800	5	25N	30W	1965	3,4,5,5½	2
Bristow Creek	15A10	4200	3	32N	30W	1969	1,2,3,4,5	1
Brush Creek	14A04	5000	12	30N	26W	1937	3,4,5	1,2
Cedar Grove	15A13	4100	35	28N	31W	1969	1,2,3,4,5,5½,6	1
Clingbeck Trail	15A06	6100	9	36N	29W	1969	3,4,5,5½,6	1
Davis Creek	15A04	5400	20	37N	33W	1969	1,2,3,4,5,5½,6	1
Dodge Creek	15A07	5200	35	37N	29W	1969	3,4,5,5½,6	1
Garver Creek	15A05	4250	18	37N	32W	1969	1,2,3,4,5,5½,6	1
Graves Creek	14A11	4300	1	36N	25W	1937	3,4,5,5½,6	1,2
Hawkins Lake	15A03	6550	18	37N	33W	1969	1,2,3,4,5,5½,6	1
Keeler Creek	16A09	3300	25	30N	35W	1969	3,4,5	1
Lost Soul	15A09	5000	31	33N	29W	1969	1,2,3,4,5,5½,6	1
Poorman Creek	15A12	5100	5	27N	31W	1969	1,2,3,4,5,5½,6	1
Red Mountain	15A01	6000	4	36N	29W	1937	3,4,5,5½,6	1,2
Stahl Peak	14A12	6050	5	36N	25W	1959	3,4,5,5½,6	1
Wessel Divide	14A07	5450	20	37N	24W	1937	3,4,5,5½,6	1,2
FLATHEAD RIVER								
Bessoo Peak	14B03	5150	11	24N	25W	1961	3,4,5	1,5
Beaver Lake	13A11	5900	31	28N	11W	1964	3,4,5	2
Big Creek	13B03	6750	7	22N	18W	1941	3,4,5, 6	1,5
Camp Misery	13A17	6400	30	28N	18W	1962	3,4,5	1,2
Desert Mountain	13A02	5600	24	31N	19W	1937	1,2,3,4,5, 6	1,2
Fatty Creek	13B04	5500	8	22N	18W	1962	3,4,5, 6	1,5
Flattop Mountain	13A19	6300	12	35N	18W	1968	1,2,3,4,5 6	1,6
Griffin Creek Divide	14A09	5150	11	28N	25W	1960	3,4,5	1,5
Gunsight Lake	13B12	6300	35	26N	14W	1964	3,4,5	1
Hell Roaring Divide	14A03	5770	35	32N	22W	1942	1,2,3,4,5,5½,6	2
Holbrook	13B13	4530	18	21N	13W	1951	1,2,3,4,5	1,2
Kishenehn	14A06	3890	14	37N	22W	1954	3,4	6
Logan Creek	14A05	4300	34	30N	24W	1937	3,4,5	1,2
Marias Pass	13A05	5250	34	30N	14W	1934	1,2,3,4,5	3
Mineral Creek	13A16	4000	29	35N	17W	1957	3,4,5	6
North Fork Jocko	13B07	6330	3	17N	17W	1941	3,4,5,5½,6	1,5
Spotted Bear Mountain	13B02	7000	23	25N	15W	1948	1,2,3,4,5	1
Trinkus Lake	13B01	6100	9	25N	17W	1948	3,4,5	1
Twin Creeks	13B11	3580	24	26N	16W	1951	1,2,3,4,5	1
Upper Holland Lake	13B05	6200	28	20N	15W	1948	3,4,5	1
CLARK FORK RIVER								
Black Pine	13C13	7100	26	8N	15W	1959	1,2,3,4,5,5½,6	1
Copper Creek	12B10	5700	1	15N	9W	1962	3,4,5	1,2
Cotter Mine	12B11	6250	2	15N	9W	1962	3,4,5	1,2
Coyote Hill	13B10	4200	12	18N	16W	1947	1,2,3,4,5	1,2
El Dorado Mine	13C09	7800	23	8N	12W	1949	3,4	1
Fred Burr Pass	13C11	8000	12	6N	13W	1957	3,4,5	1
Gold Creek Lake	13C10	7200	14	8N	12W	1949	3,4	1
Heart Lake Trail	14C10	4800	11	14N	27W	1965	3,4,5	1,2
Hoodoo Basin	15C10	6000	17	14N	27W	1967	1,2,3,4,5,5½,6	1,2
Hoodoo Creek	15C01	5900	16	14N	27W	1937	1,2,3,4,5	1,2
Intergeard	13C04	6450	6	5N	13W	1936	2,3,4,5	4
Lubrecht Forest No. 3	13C21	5450	19	13N	14W	1951	1,2,3,4,5	8
Lubrecht Forest No. 4	13C22	4650	23	13N	15W	1951	1,2,3,4,5	8
Lubrecht Forest No. 6	13C08	4040	11	13N	15W	1951	1,2,3,4,5	8
N. Fork Elk Creek	13C31	6250	20	13N	13W	1968	1,2,3,4,5,5½,6	8
Red Lion	13C12	7100	22	6N	13W	1958	3,4,5	1
Skelkaho Summit	13C03	7260	30	6N	17W	1937	3,4,5,5½,6	1
Silde Rock Mountain	13C02	7100	35	10N	16W	1937	3,4,5	1
Southern Cross	13C05	6500	8	5N	13W	1936	2,3,4	4
Spring Gulch	13C18	6000	12	14N	19W	1961	1,2,3,4,5	8
Storm Lake	13C07	7780	19	4N	13W	1939	1,2,3,4,5	1
Stuart Mill	13C06	6500	19	5N	13W	1936	2,3,4	4
Stuart Mountain	13C01	7400	6	14N	18W	1936	1,2,3,4,5,5½,6	8
T.V. Mountain	14B01	6800	33	15N	19W	1956	1,2,3,4,5,5½,6	8
BITTERROOT RIVER								
Ambrose	13C16	6480	28	9N	18W	1960	3,4,5	1
East Fork R.S.	13D01	5400	16	2N	17W	1937	3,4	1
Gibbons Pass	13D02	7100	4	2S	19W	1934	1,2,3,4,5,5½,6	1,3
Lost Horse	14C07	5940	5	4N	23W	1960	3,4,5,5½,6	1
Nez Perce Camp	14D02	5680	19	1S	23W	1937	3,4,5	1
Nez Perce Pass	14D01	6570	25	1S	24W	1937	3,4,5	1
Saddle Mountain	13D22	7940	5	2S	19W	1965	3,4,5,5½,6	1
Twelvemile Creek	14C13	5600	34	5N	23W	1968	1,2,3,4,5,5½,6	1
Twin Lakes	14C08	6510	32	5N	23W	1960	3,4,5,5½,6	1
ST. MARY RIVER BASIN								
Hudson Bay Divide	13A18	5800	24	34N	14W	1963	3,4,5	3
Iceberg Lake No. 3	13A03	5600	1	35N	17W	1922	5	3,9
Josephine Lower No. 9	13A14	4900	22	35N	16W	1955	5	3,9
Mount Allen No. 7	13A07	5700	27	35N	16W	1922	5	3,9
Piegan Pass No. 6	13A06	5500	27	35N	16W	1922	5	3,9
Pterniges No. 8	13A08	5800	36	36N	17W	1937	5	3,9

MISSOURI RIVER BASIN

Drainage Basin & Course Name	Number	Elev.	Sec.	Twp.	Range	Record Began	Measuring Dates 1/	Meas. By 2/
BEAVERHEAD RIVER								
Bloody Dick	13D10	7600	12	8S	16W	1948	3,4,5	1
Carter Creek	12D04	7400	22	8S	7W	1963	2,3,4	11
Dad Creek Lake	13E22	8400	24	12S	13W	1965	3,4,5	1
Elk Horn Springs	13D15	7800	21	4S	12W	1935	3,4,5	3
Gold Stone	13D09	8100	11	8S	16W	1948	3,4,5	1
Lakeview Canyon	11E04	6930	26	14S	2W	1948	3,4,5	10
Lakeview Ridge	11E03	7400	27	14S	2W	1948	3,4,5	10
Lemhi Pass	13E01	7480	9	10S	15W	1948	3,4	1
Lemhi Ridge	13E23	8100	4	10S	15W	1967	3,4	1
Trail Creek	13E02	7090	15	10S	15W	1948	3,4	1
White Pine Ridge	12E01	8850	18	14S	9W	1948	3,4,5	1
RUBY RIVER								
Branham Lakes	11D14	8850	5	4S	3W	1967	3,4,5	1,12
Clover Meadow	11D08	8600	28	9S	2W	1963	3,4,5	1
Divide	12B07	7900	14	12S	4W	1963	3,4,5	1
Middle Mill Creek	11D15	7850	15	4S	3W	1967	3,4,5	1,12
Notch	12E06	8500*	18	11S	4W	1963	3,4,5	1
Smuggler Mine	12D05	6960	24	4S	3W	1967	3,4,5	1,12
BIG HOLE RIVER								
Abundance Lake	13D20	8800	7	3S	11W	1963	3,4,5	1
Corkhorse Lake	13D19	8600	4	8S	16W	1963	3,4,5	1
Foolhen	13D21	8280	11	1S	13W	1963	3,4,5	1
Pellsade Creek	13D23	8450	3	2N	15W	1967	3,4,5	1
Sleg-A-Melt Lake	13D24	8750	29	5S	17W	1968	3,4,5	1
JEFFERSON RIVER								
Berry Meadow	12C07	7300	8	5N	5W	1962	3,4,5	1
Copper Mountain	12C09	7700	13	3N	7W	1966	2,3,4,5	4
Nez Perce Creek	12C10	6500	16	4N	6W	1967	2,3,4,5	4
Picnic Grounds	12C06	6500	21	5N	6W	1941	2,3,4	4
Pipestone Pass	12D01	7200	10	1N	7W	1938	1,2,3,4,5	1
Rocker Peak	12C11	8000	17	7N	5W	1968	1,2,3,4,5	1
MADISON RIVER								
Cell Road	11D07	8050	21	8S	2W	1962	3,4,5	1
Four Mile	11D12	6900	5	4S	2W	1965	3,4,5	1
Nebgen Cam	11E05	6550	22	11S	3E	1934	1,2,3,4,5	3
Jack Creek	11C05	7500	13	6S	1E	1961	3,4	1
Lake Creek	11E22	6100	27	11S	1E	1965	3,4,5,5½,6	2
Lion Mountain	11E28	8760	23	11S	2W	1967	3,4,5,5½,6	2
Lower Twin	11D11	7900	12	4S	3W	1965	3,4,5	1
Madison Plateau	11E31	7750	28	14S	5E	1968	1,2,3,4,5,5½,6	1,2
Meridian Creek	11E23	7000	31	12S	1E	1965	3,4,5,5½,6	2
North Meadow	11C03	7500	24	3S	3W	1961	3,4,5	1
Potomagetown Park	11E21	7150	33	10S	3E	1965	3,4,5	2
Sentinel Creek	11E20	8300	17	10S	3E	1965	3,4,5	2
Tepee Creek	11E24	8000	15	12S	1W	1965	3,4,5,5½,6	2
West Yellowstone	11E07	6700	34	13S	5E	1934	1,2,3,4,5	1,3,6
Whiskey Creek	11E30	6800	19	14S	5E	1967	3,4,5	2
GALLATIN RIVER								
Arch Falls	10C14	7350	3	5S	6E	1963	1,2,3,4,5,5½,6	1
Bear Basin	11D09	8150	9	6S	3E	1963	3,4,5	1
Bridger Bowl	10C15	7250	25	1N	6E	1965	1,2,3,4,5,5½,6	1
Cerrot Basin	11E29	9000	18	10S	4E	1967	1,2,3,4,5, 6	2
Devil's Slide	10C04	8100	14	5S	6E	1935	1,2,3,4,5,5½,6	1
Hood Meadow	10C03	6600	22	4S	6E	1935	2,3,4,5,5½,6	1
Lick Creek	10C13	6860	10	4S	6E	1964	1,2,3,4,5,5½,6	1
Little Park	11D10	7400	22	8S	3E	1963	3,4,5	1
Maynard Creek	10D18	6210	19	1N	7E	1967	1,2,3,4,5,5½,6	1
New World	10C01	6700	24	3S	6E	1939	2,3,4	1
Shower Falls	10D16	8100	14	5S	6E	1966	1,2,3,4,5,5½,6	1
Taylor Peaks	11D13	8500	26	9S	2E	1967	3,4,5	1
Twenty-One Mile	11E06	7150	1	11S	5E	1934	1,2,3,4,5	3
MISSOURI RIVER MAIN STEM								
Bear Paw Ski Area	9A02	5200	21	28N	16E	1967	1,2,3,4,5	7
Boulder Mountain	11C01	7950	1	9N	3E	1963	3,4,5	1
Chessman Reservoir	12C05	6200	2	8N	5W	1936	1,2,3,4,5	3
Daisy Cabin	10C15	7600	33	11N	11E	1969	3,4,5	2
Eagle Creek	10C13	7000	2	5N	10E	1969	3,4,5	2
Elk Peak	10C07	8000	10	8N	8E	1963	3,4,5	1
Forest Lake G.S.	10C14	6400	26	6N	10E	1969	3,4,5	2
Grasshopper	10C02	7000	19	9N	8E	1938	3,4,5	1
Haymaker	10C11	8050	16	11N	12E	1969	3,4,5	2
Johnson Park	10C12	6450	16	10N	11E	1969	3,4,5	2
Kings Hill	10C01	7500	34	13N	8E	1934	3,4,5,5½,6	1,3
Rocky Boy	9A01	5200	15	28N	16E	1941	1,2,3,4,5	7
Stemple Pass	12C01	6600	16	13N	7W	1934	3,4,5	3
Ten Mile Lower	12C02	6600	12	8N	6W	1935	1,2,3,4,5	3
Ten Mile Middle	12C03	6800	13	8N	6W	1934	1,2,3,4,5	3
Ten Mile Upper	12C04	8000	19	8N	5W	1935	1,2,3,4,5	3
SUN-TETON-MARIAS RIVERS								
Badger Pass	13A15	6900	4	27N	11W	1964	3,4,5	1
Blue Lake	13A20	5900	25	28N	11W	1969	3,4,5	1
Cabin Creek	12B06	5200	33	23N	10W	1949	3,4,5	2
Five-Bull	12B09	5700	25	20N	10W	1948	3,4,5	1
Freight Creek	12A01	6000	13	26N	10W	1948	3,4,5	1
Goat Mountain	12B07	7000	20	22N	10W	1934	3,4,5	3
Mount Lockhart	12B12	6400	18	24N	9W	1969	1,2,3,4,5,5½,6	2
Waldron	12B13	5650	17	25N	9W	1969	1,2,3,4,5,5½,6	2
Wrong Creek	12B04	5700	32	25N	10W	1949	3,4,5	2
Wrong Ridge	12B03	6800	17	25N	10W	1949	3,4,5	2
JUDITH RIVER								
Avalanche	9C02	7100	24	12N	17E	1966	3,4,5	1
Crystal Lake	9C01	6100	19	12N	18E	1941	3,4,5	1
Rock Creek	9C03	5600	8	12N	18E	1966	3,4,5	1
Spur Park	10C06	8000	20	12N	9E	1963	1,2,3,4,5, 6	1
UPPER YELLOWSTONE RIVER								
Bald Ridge	10C05	7500	11	4N	10E	1961	3,4,5	1
Camp Senie	9D01	7890	2	8S	18E	1937	3,4,5,5½,6	1
Cooke Station	9D07	8150	19	9S	15E	1966	3,4,5	2
Crevice Mountain	10D05	8400	22	9S	9E	1935	3,4	2
Fisher Creek	9D06	9100	11	9S	14E	1966	1,2,3,4,5,5½,6	1,2
Grizzly Peak	9D05	8400	26	7S	19E	1961	1,2,3,4,5	1,2
Independence	10D06	7850	22	7S	12E	1940	3,4,5	1
Monument Peak	10D12	8800	22	7S	12E	1961	3,4,5	1
Northeast Entrance	10D07	7400	33	9S	14E	1937	1,2,3,4,5,5½,6	1,6
Porcupine R.S.	10C03	6500	10	4N	10E	1938	3,4,5	1
Sacajawea	10D10	6550	36	2N	6E	1960	3,4,5	1
South Fork Shields	10C08	8100	13	4N	10E	1965	3,4,5	1
Timberline Creek	9D04	8850	10	8S	18E	1961	3,4,5	1
West Rosebud	9D02	7500	9	7S	16E	1960	3,4	4
White Mill	9D08	8700	18	9S	15E	1967	3,4,5	2

SOIL MOISTURE STATIONS

COLUMBIA RIVER BASIN

Drainage Basin & Course Name	Number	Elev.	Sec.	Twp.	Range	Record Began	Measuring Dates 1/	Meas. By 2/
KOOTENAI RIVER								
Baree Trail	15B15M	3800	5	25N	30W	1964	Monthly	2
Murphy Lake R.S.	14A10M	3000	5	34N	25W	1964	Monthly	2
Raven R.S.	15A02M	3050	2	26N	29W	1964	Monthly	2
FLATHEAD RIVER								
Desert Mountain	13A02M	5600	24	31N	19W	1956	Monthly	1
Marias Pass	13A05M	5250	34	30N	14W	1950	Monthly	1
CLARK FORK RIVER								
Black Pine	13C13M	7100	26	8N	15W	1965	Monthly	1
Lubrecht Forest	13C14M	4100	11	13N	15W	1961	Monthly	8
Seeley Lake	13B19M	4030	21	17N	15W	1963	Monthly	2
Skelkaho Summit	13C03M	7260	30	6N	17W	1964	Monthly	1
BITTERROOT RIVER								
Gibbons Pass	13D18M	7100	4	2S	19W	1962	Monthly	1
Lolo Pass	14C05M	5250	11	10N	24W	1963	Monthly	1

MISSOURI RIVER BASIN

Drainage Basin & Course Name	Number	Elev.	Sec.	Twp.	Range	Record Began	Measuring Dates 1/	Meas. By 2/
BEAVERHEAD RIVER								
Lakeview	11E13M	6700	23	14S	2W	1962	Monthly	10
MADISON RIVER								
Red Cliff	11D04M	4800	7	3S	1E	1961	Monthly	7
West Yellowstone	11E07M	6700	34	13S	5W	1966	Monthly	6
GALLATIN RIVER								
Bridger Bowl	10C15M	7250	25	1N	6E	1965	Monthly	1
College Site	11D02M	4856	18	2S	5E	1956	Monthly	1
Lick Creek	10C13M	6860	10	4S	6E	1965	Monthly	1
Twenty-One Mile	11E06M	7150	1	11S	5E	1963	Monthly	6
MISSOURI RIVER MAIN STEM								
Kings Hill	10C01M	7420	34	13N	8E	1963	Monthly	1
Stemple Pass	12C08M	6350	16	13N	7W	1963	Monthly	1
YELLOWSTONE RIVER								
Battle Ridge	10D11M	6020	32	2N	7E	1960	Monthly	1
Northeast Entrance	10D07M	7350	33	9S	14E	1962	Monthly	6

LEGEND

1/ Numerals 1,2,3,4,5,5½,6 refer to January 1, February 1, March 1, April 1, May 1, May 15 and June 1.

2/ Numerals refer to Agency that makes the snow survey as follows:

1. U. S. Soil Conservation Service
2. U. S. Forest Service
3. U. S. Geological Survey
4. Montana Power Company
5. U. S. Indian Service
6. U. S. National Park Service
7. MSU Agricultural Experiment Station
8. U. of M. School of Forestry
9. Department of Energy, Mines & Resources
10. U. S. Bureau of Sport Fisheries & Wildlife
11. Private Cooperator
12. Soil and Water Conservation District

WATER SUPPLY FORECASTS

AS OF MARCH 1, 1969

(1000 Acre Feet)

NO.	RIVER AND FORECAST POINT	FORECAST PERIOD	FORECAST THIS YEAR	PERCENT AVERAGE	MEASURED FLOW LAST YEAR*	MEASURED FLOW AVERAGE
	COLUMBIA RIVER BASIN					
	FISHER RIVER					
3020	Jennings (near)	Apr-Sept	400	134	181	298
		Apr-July	375	134	162	281
	KOOTENAI RIVER					
3030	Libby (at)	Apr-Sept	9220	114	6961	8025
		Apr-July	7950	114	5881	6956
	YAAK RIVER					
3045	Troy (near)	Apr-Sept	710	124	415	573
		Apr-July	680	124	382	549
	KOOTENAI RIVER					
3050	Leonia (at)	Apr-Sept	10790	118	7901	9198
		Apr-July	9500	118	6706	8072
		Apr-June	7600	118	5192	6463
	GERMAN GULCH					
3235	Ramsay (near)	Apr-Sept	15.3	128		12.0
		Apr-July	14.6	128		11.4
	RACETRACK CREEK					
3241	Anaconda (near)	Apr-Sept	39.0	114		34.1
		Apr-July	31.5	114		27.6
	FLINT CREEK					
3301	Boulder Creek (below)(3)	Apr-Sept	88.0	126	77.8	69.6
		Apr-July	69.6	126	56.5	55.1
	MIDDLE FORK ROCK CREEK					
3320	Philipsburg (near)	Apr-Sept	91.0	124		73.4
		Apr-July	82.0	124		66.2
	NEVADA CREEK					
3355	Finn (near)	Apr-Sept	26.0	125		20.7
		Apr-July	24.2	125		19.3
	BLACKFOOT RIVER					
3400	Bonner (near)	Apr-Sept	1220	120	686	1008
		Apr-July	1090	120	592	912
		Apr-June	945	120	507	788
	CLARK FORK RIVER					
3404	Milltown (above)(4)	Apr-Sept	950	126	748	755
		Apr-July	830	126	605	659
		Apr-June	710	126	517	562
	CLARK FORK RIVER					
3405	Missoula (above)	Apr-Sept	2170	123	1434	1763
		Apr-July	1920	123	1197	1572
		Apr-June	1655	123	1024	1350

(3) Sum Flint Creek at Maxville and Boulder Creek at Maxville.
(4) Difference in observed flow Clark Fork above Missoula and Blackfoot near P[illegible]er.

*PROVISIONAL DATA FURNISHED BY U.S. GEOLOGICAL SURVEY

Note: All Averages Based on 1953-67, 15 year period.

WATER SUPPLY FORECASTS

AS OF MARCH 1, 1969

(1000 Acre Feet)

NO.	RIVER AND FORECAST POINT	FORECAST PERIOD	FORECAST THIS YEAR	PERCENT AVERAGE	MEASURED FLOW LAST YEAR*	MEASURED FLOW AVERAGE
	WEST FORK BITTERROOT RIVER					
3425	Conner (near)(5)	Apr-Sept	215	126	156	170
		Apr-July	200	126	142	158
	EAST FORK BITTERROOT RIVER					
3434	Conner (near)	Apr-Sept	215	126	163	170
		Apr-July	194	126	145	154
	BITTERROOT RIVER					
3440	Darby (near)	Apr-Sept	700	125	548	558
		Apr-July	647	125	498	517
		Apr-June	566	125		453
	SKALKAHO CREEK					
3465	Hamilton (near)	Apr-Sept	69.0	124	50.9	55.8
		Apr-July	60.5	124	43.2	48.9
	BLODGETT CREEK					
3475	Corvallis (near)	Apr-Sept	50.8	118	41.9	42.9
		Apr-July	48.2	118	36.2	40.8
	BITTERROOT RIVER					
3528	Missoula (at)(6)	Apr-Sept	1800	122	1416	1466
		Apr-July	1670	122	1237	1360
		Apr-June	1440	122	1066	1175
	CLARK FORK RIVER					
3530	Missoula (below)	Apr-Sept	3970	122	2850	3229
		Apr-July	3590	122	2434	2932
		Apr-June	3095	122	2090	2525
	ST. REGIS RIVER					
3540	St. Regis (near)	Apr-Sept	430	130	303	332
		Apr-July	410	130	205	316
	CLARK FORK RIVER					
3545	St. Regis (at)	Apr-Sept	5520	126	3688	4398
		Apr-July	5000	126	3164	3993
		Apr-June	4340	126	2705	3451
	NORTH FORK FLATHEAD RIVER					
3555	Columbia Falls (near)	Apr-Sept	2400	118	1678	2023
		Apr-July	2190	118	1463	1846
		Apr-June	1840	118	1227	1562
	MIDDLE FORK FLATHEAD RIVER					
3585	West Glacier (near)	Apr-Sept	2150	111	1675	1931
		Apr-July	1990	111	1433	1791
		Apr-June	1690	111	1267	1521
	SOUTH FORK FLATHEAD RIVER					
3625	Columbia Falls (near)(7)	Apr-Sept	2650	112	2056	2358
		Apr-July	2500	112	1784	2235
		Apr-June	2210	112	1567	1967

(5) Adjusted for storage in Painted Rocks Reservoir.
(6) Difference in observed flow Clark Fork above and below Missoula.
(7) Adjusted for storage in Hungry Horse Reservoir.

*PROVISIONAL DATA FURNISHED BY U.S. GEOLOGICAL SURVEY

Note: All Averages Based on 1953-67, 15 year period.

WATER SUPPLY FORECASTS

AS OF MARCH 1, 1969

(1000 Acre Feet)

NO.	RIVER AND FORECAST POINT	FORECAST PERIOD	FORECAST THIS YEAR	PERCENT AVERAGE	MEASURED FLOW LAST YEAR*	MEASURED FLOW AVERAGE
	FLATHEAD RIVER					
3630	Columbia Falls (at)(7)	Apr-Sept	7350	114	5485	6467
		Apr-July	6850	114	4757	6003
		Apr-June	5880	114	4067	5155
	SWAN RIVER					
3700	Big Fork (near)	Apr-Sept	800	116	630	688
		Apr-July	705	116	509	607
		Apr-June	575	116	398	496
	FLATHEAD RIVER					
3720	Polson (near)(8)	Apr-Sept	9050	117	6438	7701
		Apr-July	8400	117	5503	7157
		Apr-June	7200	117	4675	6123
	CLARK FORK RIVER					
3890	Plains (near)(8)	Apr-Sept	15120	121	10419	12482
		Apr-July	13800	121	8882	11448
		Apr-June	11900	121	7495	9802
	THOMPSON RIVER					
3895	Thompson Falls (near)	Apr-Sept	375	133	179	283
		Apr-July	336	133	151	253
	PROSPECT CREEK					
3907	Thompson Falls (at)	Apr-Sept	205	134	103	152
		Apr-July	192	134	94.3	143
	CLARK FORK RIVER					
3920	Whitehorse Rapids (at)(9)	Apr-Sept	17120	123		13987
		Apr-July	15700	123		12787
		Apr-June	13500	123		10953

(7) Adjusted for storage in Hungry Horse Reservoir.
(8) Adjusted for storage in Hungry Horse Reservoir and Flathead Lake.
(9) Adjusted for storage in Hungry Horse, Flathead Lake and Noxon Rapids Reservoirs.

*PROVISIONAL DATA FURNISHED BY U.S. GEOLOGICAL SURVEY

Note: All Averages Based on 1953-67, 15 year period.

WATER SUPPLY FORECASTS

AS OF MARCH 1, 1969

(1000 Acre Feet)

NO.	RIVER AND FORECAST POINT	FORECAST PERIOD	FORECAST THIS YEAR	PERCENT AVERAGE	MEASURED FLOW LAST YEAR*	MEASURED FLOW AVERAGE
	MISSOURI RIVER BASIN					
	RED ROCK RIVER					
0125	Monida (near)(11)	Apr-Sept	150	190	115	79.1
		Apr-July	140	190	106	74.2
	BEAVERHEAD RIVER					
0154	Armstead (near)(11)(12)	Apr-Sept	225	212	168	106
		Apr-July	191	212	134	90.0
	RUBY RIVER					
0195	Alder (near)	Apr-Sept	110	138	99.2	80.0
		Apr-July	92.5	138	81.4	67.0
	BIG HOLE RIVER					
0255	Melrose (near)	Apr-Sept	1010	147	705	690
		Apr-July	945	147	625	642
	BIRCH CREEK					
0260	Glen (near)	Apr-Sept	17.4	133	15.2	13.1
		Apr-July	14.3	133	12.6	11.0
	BOULDER RIVER					
0330	Boulder (near)	Apr-Sept	123	156	103	78.9
		Apr-July	117	156	94.9	75.5
	JEFFERSON RIVER					
0345	Sappington (at)(12)	Apr-Sept	1570	166	1039	948
		Apr-July	1420	166	876	857
	WILLOW CREEK					
0350	Harrison (near)	Apr-Sept	24.5	158	19.5	15.5
		Apr-July	22.4	158	16.9	14.2
	MADISON RIVER					
0375	West Yellowstone (near)	Apr-Sept	270	127	244	212
		Apr-July	203	127	181	160
	MADISON RIVER					
0385	Grayling (near)(13)	Apr-Sept	600	139	521	430
		Apr-July	470	139	390	337
	MADISON RIVER					
0410	McAllister (near)(14)	Apr-Sept	1010	139	907	727
		Apr-July	800	139	689	575
	GALLATIN RIVER					
0435	Gateway (near)	Apr-Sept	600	130	641	461
		Apr-July	511	130	533	393
	BRIDGER CREEK					
0485	Bozeman (near)	Apr-Sept	25.5	124	43.2	20.5
		Apr-July	23.9	124	39.1	19.3

(11) Adjusted for storage in Lima Reservoir.
(12) Adjusted for storage in Clark Canyon Reservoir.
(13) Adjusted for storage in Hebgen Lake.
(14) Adjusted for storage in Hebgen and Ennis Lakes.

*PROVISIONAL DATA FURNISHED BY U.S. GEOLOGICAL SURVEY

Note: All Averages Based on 1953-67, 15 year period.

WATER SUPPLY FORECASTS

AS OF MARCH 1, 1969

(1000 Acre Feet)

NO.	RIVER AND FORECAST POINT	FORECAST PERIOD	FORECAST THIS YEAR	PERCENT AVERAGE	MEASURED FLOW LAST YEAR*	MEASURED FLOW AVERAGE
	HYALITE CREEK					
0500	Bozeman (near)(15)	Apr-Sept	45.5	122	53.8	37.4
		Apr-July	39.5	122	40.8	32.5
	GALLATIN RIVER					
0525	Logan (at)	Apr-Sept	680	144	781	473
		Apr-July	575	144	643	401
	MISSOURI RIVER					
0545	Toston (at)(16)	Apr-Sept	3200	152	2691	2105
		Apr-July	2790	152	2160	1836
	PRICKLY PEAR CREEK					
0615	Clancy (near)	Apr-Sept	36.8	168		21.9
		Apr-July	32.1	168		19.1
	LITTLE PRICKLY PEAR CREEK					
0711	Sieben Ranch (at)	Apr-Sept	39.5	141		28.0
		Apr-July	33.9	141		24.0
	DEARBORN RIVER					
0735	Craig (near)	Apr-Sept	135	98		137
		Apr-July	128	98		130
	SHEEP CREEK					
0770	W. Sulphur Springs (near)	Apr-Sept	24.0	130	27.4	18.4
		Apr-July	20.9	130	24.0	16.0
	SMITH RIVER					
0775	Eden (near)	Apr-Sept	230	128		179
		Apr-July	211	128		165
	SUN RIVER					
0786	Gibson Dam (at)(17)	Apr-Sept	580	96	429	604
		Apr-July	532	96	380	555
	BELT CREEK					
0905	Monarch (near)	Apr-Sept	140	128		109
		Apr-July	128	128		100
	MISSOURI RIVER					
0908	Fort Benton (at)(18)	Apr-Sept	4460	134		3321
		Apr-July	3790	134		2834
	TWO MEDICINE CREEK					
0920	Browning (near)(19)	Apr-Sept	244	95		256
		Apr-July	232	95		245
	BADGER CREEK					
0925	Browning (near)	Apr-Sept	125	94		133
		Apr-July	109	94		116
	CUT BANK CREEK					
0990	Cut Bank (at)	Apr-Sept	116	97		120
		Apr-July	107	97		111

(15) Adjusted for storage in Middle Creek Reservoir.
(16) Adjusted for storage in Hebgen and Ennis Lakes and Clark Canyon Reservoir.
(17) Adjusted for storage in Gibson Reservoir and diversions.
(18) Adjusted for storage in Canyon Ferry Reservoir.
(19) Adjusted for storage in Two Medicine Res. & diversions into Two Medicine Canal.

*PROVISIONAL DATA FURNISHED BY U.S. GEOLOGICAL SURVEY

Note: All Averages Based on 1953-67, 15 year period.

WATER SUPPLY FORECASTS

AS OF MARCH 1, 1969

(1000 Acre Feet)

NO.	RIVER AND FORECAST POINT	FORECAST PERIOD	FORECAST THIS YEAR	PERCENT AVERAGE	MEASURED FLOW LAST YEAR*	MEASURED FLOW AVERAGE
	MARIAS RIVER					
0995	Shelby (near)(20)	Apr-Sept	590	98	409	604
		Apr-July	570	98	339	581
	MISSOURI RIVER					
1095	Virgelle (at)(21)	Apr-Sept	5200	129		4036
		Apr-July	4500	129		3511
	S. FORK JUDITH RIVER					
1098	Utica (near)	Apr-Sept	15.8	126	12.4	11.2
		Apr-July	14.8	126	11.1	10.1
	MISSOURI RIVER					
1152	Landusky (near)(21)	Apr-Sept	5750	128		4484
		Apr-July	5000	128		3889
	N. FORK MUSSELSHELL RIVER					
1155	Delpine (near)	Apr-Sept	6.4	116	7.6	5.5
		Apr-July	5.5	117	6.1	4.7
	S. FORK MUSSELSHELL RIVER					
1185	Martinsdale (above)	Apr-Sept	53.0	115	53.0	46.2
		Apr-July	50.6	115	48.6	44.0
	MISSOURI RIVER					
1320	Ft. Peck Dam (below)(22)	Apr-Sept	5570	128		4312
		Apr-July	4910	128		3824
	MILK RIVER					
1350	Eastern Crossing (at)	Mar-Sept	285	101	303	281
	MISSOURI RIVER					
1770	Wolf Point (near)(22)	Apr-Sept	6100	130		4683
		Apr-July	5450	130		4168
	MISSOURI RIVER					
3300	Williston, N.D. (nr)(29)	Apr-Sept	12900	117		10998
		Apr-July	11500	117		9823
	SASKATCHEWAN RIVER BASIN					
	ST. MARY RIVER					
0175	Babb (near)(30)	Apr-Sept	515	104		492
		Apr-July	445	104		427

(20) Adjusted for storage in Two Medicine, Four Horns, Lake Frances & Swift Reservoirs.
(21) Adjusted for storage in Canyon Ferry and Tiber Reservoirs.
(22) Adjusted for storage in Canyon Ferry, Tiber and Fort Peck Reservoirs.
(29) Adjusted for storage in Canyon Ferry, Tiber, Fort Peck, Buffalo Bill, Boysen and Yellowtail Reservoirs. Sum Yellowstone River near Sidney & Missouri River near Culbertson.
(30) Adjusted for storage in Lake Sherburne.

*PROVISIONAL DATA FURNISHED BY U.S. GEOLOGICAL SURVEY

Note: All Averages Based on 1953-67, 15 year period.

WATER SUPPLY FORECASTS

AS OF MARCH 1, 1969

(1000 Acre Feet)

NO.	RIVER AND FORECAST POINT	FORECAST PERIOD	FORECAST THIS YEAR	PERCENT AVERAGE	MEASURED FLOW LAST YEAR*	MEASURED FLOW AVERAGE
	YELLOWSTONE RIVER BASIN					
	YELLOWSTONE RIVER					
1915	Corwin Springs (at)	Apr-Sept	2130	113	2103	1880
		Apr-July	1780	113	1626	1575
	YELLOWSTONE RIVER					
1925	Livingston (near)	Apr-Sept	2430	114	2590	2122
		Apr-July	2020	114	2038	1769
	SHIELDS RIVER					
1935	Clyde Park (at)	Streamflow measurements discontinued				
	BOULDER RIVER					
2000	Big Timber (at)	Apr-Sept	405	117		347
		Apr-July	382	117		327
	STILLWATER RIVER					
2050	Absarokee (near)(25)	Apr-Sept	600	108		558
		Apr-July	512	108		474
	CLARKS FORK RIVER					
2075	Chance (at)	Apr-Sept	615	106	569	582
		Apr-July	560	106	475	530
	CLARKS FORK RIVER					
2085	Edgar (at)	Apr-Sept	635	105	614	612
		Apr-July	565	105	484	547
	ROCK CREEK					
2095	Red Lodge (near)	Apr-Sept	116	109	150	106
		Apr-July	89.5	109	122	82.1
	YELLOWSTONE RIVER					
2145	Billings (at)	Apr-Sept	4480	114	4777	3944
		Apr-July	3860	114	3801	3400
	BIG HORN RIVER					
2870	St. Xavier (near)(26)	Apr-Sept	1670	97	2104	1719
		Apr-July	1580	97	1668	1625
	LITTLE BIG HORN RIVER					
2920	Lodgegrass (near)(28)	Apr-Sept	110	90		123
		Apr-July	98	90		109
	YELLOWSTONE RIVER					
3090	Miles City (at)(27)	Apr-Sept	6325	108		5850
		Apr-July	5600	108		5177
	YELLOWSTONE RIVER					
3295	Sidney (near)(27)	Apr-Sept	6300	104		6069
		Apr-July	5650	104		5454

(25) Adjusted for storage in Mystic Lake.
(26) Adjusted for storage in Buffalo Bill, Boysen, Bull Lake & Yellowtail Reservoirs.
(27) Adjusted for storage in Buffalo Bill, Boysen and Yellowtail Reservoirs.
(28) Sum Little Big Horn below Pass Creek and Lodgegrass Creek near Wyola.

*PROVISIONAL DATA FURNISHED BY U.S. GEOLOGICAL SURVEY

Note: All Averages Based on 1953-67, 15 year period.

SNOW SURVEY DATA

AS OF MARCH 1, 1969

(Inches)

SNOW COURSE			CURRENT DATA			PAST RECORD	
						WATER CONTENT	
NO.	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE
	COLUMBIA RIVER BASIN						
KOOTENAI RIVER							
15A11	Bald Eagle Peak	5700	2/24	153	68.5	-	-
15A08	Banfield Mountain	5600	2/28	76	28.1	-	-
15B11	Baree Creek	5500	2/28	122	48.8	36.0	43.5*
15B16	Baree Midway	4600	3/3	97	35.9	24.4	-
15B15	Baree Trail	3800	2/28	58	18.5	0.0	8.2*
16A08	Bear Mountain	5400	3/1	157	66.5	-	-
15A10	Bristow Creek	3900	2/28	51	16.9	-	-
14A04	Brush Creek	5000	2/26	49	15.2	8.1	11.7
14A13	Brush Creek Timber	5000	2/26	45	13.7	7.0	10.4*
15A13	Cedar Grove	4100	2/24	47	14.4	-	-
15A04	Davis Creek	5400	2/27	77	29.5	-	-
BC 10	Fernie	3500	3/1	45	13.5	3.3	8.6
BC 12A	Field	4200	2/27	26	6.1	6.2	5.9
15A05	Garver Creek	4250	2/27	51	15.8	-	-
BC 11	Glacier	4100	2/25	67	24.8	26.8	25.2*
14A11	Graves Creek	4300	2/26	60	20.4	10.8	17.0*
BC 43	Gray Creek	5100	2/27	56	17.6	12.7	16.0
16A07	Halverson Creek	4850	3/1	132	51.6	-	-
15A03	Hawkins Lake	6450	2/27	97	35.4	-	-
16A09	Keeler Creek	3300	3/1	59	22.4	-	-
BC 33	Kicking Horse	5400	2/26	44	12.0	12.3	13.4
BC 20B	Kimberley	3800	2/27	41	11.5	6.1	8.0
15A09	Lost Soul	4800	2/28	54	18.5	-	-
BC 32	Marble Canyon	5000	2/27	48	15.1	10.1	12.7
BC 10B	Morrissey Ridge	6100	2/23	86	31.9	20.2	25.6*
BC 10A	New Fernie	4100	3/1	59	18.7	10.3	13.6
15A12	Poorman Creek	5100	2/24	107	41.7	-	-
15A01	Red Mountain	6000	2/27	68	20.5	13.7	17.4
BC 8A	Sinclair Pass	4500	2/27	28	6.6	4.1	5.6
14A12	Stahl Peak	6050	2/26	116	43.3	-	-
BC 20A	Sullivan Mine	5100	2/28	54	16.8	12.4	12.4
BC 41	Upper Elk River	4400	2/27	34	9.5	4.8	7.4*
14A07	Weasel Divide	5450	2/26	102	38.8	26.2	31.2*

*Note: All Averages Based on 1953-67, 15 year period. *Adjusted Average*

SNOW SURVEY DATA

AS OF MARCH 1, 1969

(Inches)

SNOW COURSE			CURRENT DATA			PAST RECORD	
						WATER CONTENT	
NO.	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE
FLATHEAD RIVER							
14B03	Bassoo Peak	5150	2/24	43	13.8	7.4	10.2*
13A11	Beaver Lake	5900				19.1*	20.0*
13B03	Big Creek	6750	2/26	107	42.6	36.2	39.2
13A17	Camp Misery	6400	2/27	128	48.4	37.3	41.0*
13A02	Desert Mountain	5600	2/28	49	16.9	12.6	14.0
13B04	Fatty Creek	5500	2/26	64	21.6	17.0	19.6*
14A09	Griffin Creek Divide	5150	2/25	46	15.0	7.2	11.3*
13B12	Gunsight Lake	6300				34.5	36.0*
14A03	Hell Roaring Divide	5770	3/1	86	32.8	23.9	27.5
13B13	Holbrook	4530				6.6	9.9
14A06	Kishenehn	3890	2/27	40	11.8	6.1	9.3
14A05	Logan Creek	4300	2/26	38	10.0	6.3	8.2
13A05	Marias Pass	5250	2/25	51	16.0	12.2	16.1
13A16	Mineral Creek	4000	2/25	62	19.4	12.0	19.1
13B07	North Fork Jocko	6330	2/27	105	42.9	36.3	40.4
13B02	Spotted Bear Mountain	7000				12.2	13.6
13B01	Trinkus Lake	6100				33.8	37.0*
13B11	Twin Creeks	3580				6.5	11.3
13B05	Upper Holland Lake	6200				31.4	30.4*
CLARK FORK RIVER							
13C13	Black Pine	7100	2/25	47	16.4	13.0	11.6*
13C13	Black Pine Pillow	7100	2/25	SP	14.1	13.4	-
12B10	Copper Creek	5700	2/28	56	19.6	9.8	13.9*
12B11	Cotter Mine	6250	2/28	60	22.6	10.8	15.1*
13B10	Coyote Hill	4200	2/26	36	11.4	6.1	10.2*
13C09	El Dorado Mine	7800	2/28	63	22.9	20.9	16.8*
13C11	Fred Burr Pass	8000	2/25	73	26.3	26.4	22.0*
13C10	Gold Creek Lake	7200	2/28	50	17.0	14.2	12.6*
14C10	Heart Lake Trail	4800	2/27	70	24.4	15.3	20.2*
15C10	Hoodoo Basin	6000	2/27	134	51.5	41.9	-
15C10	Hoodoo Basin Pillow	6000	No Report			40.6	-
15C01	Hoodoo Creek	5900	2/27	129	47.8	36.7	42.5*
13C04	Intergaard	6450	2/28	33	8.9	8.3	7.0
15B02	Lookout	5250	3/2	111	41.3	22.0	32.3
13C21	Lubrecht Forest No. 3	5450	3/1	31	9.6	4.7	6.6
13C22	Lubrecht Forest No. 4	4650	3/1	18	4.8	1.9	3.5
13C08	Lubrecht Forest No. 6	4040	3/1	22	7.1	0.6	4.2
13C12	Red Lion	7100	2/25	54	16.8	17.6	13.7*
13C03	Skalkaho Summit	7260	2/27	71	26.0	25.2	22.8*
13C02	Slide Rock Mountain	7100	2/26	46	15.4	13.4	12.2*
13C05	Southern Cross	6500	2/28	28	8.2	6.8	6.0
13C18	Spring Gulch	6000				10.6	10.3*
13C07	Storm Lake	7780	2/24	46	13.6	14.3	11.2
13C06	Stuart Mill	6500	2/28	29	7.4	7.4	5.8
13C01	Stuart Mountain	7400				30.2	26.6
14B01	TV Mountain	6800	3/2	51	18.4	15.5	15.0*

SP - Snow pillow observation - water content only.

*Note: All Averages Based on 1953-67, 15 year period. *Adjusted Average*

SNOW SURVEY DATA

AS OF MARCH 1, 1969

(Inches)

SNOW COURSE			CURRENT DATA			PAST RECORD	
						WATER CONTENT	
NO.	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE
BITTERROOT RIVER							
13C16	Ambrose	6480	3/3	42	12.8	11.0	11.5*
13C32	Coyote Meadows Trail	7000	2/13	64	19.2	-	-
13D01	East Fork R. S.	5400	2/28	32	8.4	6.4	6.3*
13D02	Gibbons Pass	7100	2/26	75	26.9	21.1	19.5
14C05	Lolo Pass	5230	2/26	85	30.0	23.6	29.0*
14C07	Lost Horse	5940	2/25	89	31.3	25.8	28.0*
13D16	Moose Creek	6200	2/27	58	17.6	13.4	14.2
14D02	Nez Perce Camp	5680	2/24	46	14.0	9.1	12.7*
14D01	Nez Perce Pass	6570	2/24	51	15.8	14.8	13.8*
13D22	Saddle Mountain	7940	2/28	81	28.2	24.5	21.7*
13D22	Saddle Mountain Pillow	7940	2/28	SP	29.5	24.6	-
14C04	Savage Pass	6600	2/26	78	27.4	24.0	24.9*
14C13	Twelvemile Creek	5600	2/25	58	19.3	15.7	-
14C13	Twelvemile Creek Pillow	5600	2/25	SP	17.3	16.5	-
14C08	Twin Lakes	6510	2/25	109	41.3	37.0	37.2*
14C12	Twin Lakes Pillow	6400	2/25	SP	42.6	34.8	-

SP - Snow pillow observation - water content only.

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SNOW SURVEY DATA

AS OF MARCH 1, 1969

(Inches)

SNOW COURSE			CURRENT DATA			PAST RECORD	
NO.	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH	WATER CONTENT	WATER CONTENT LAST YEAR	WATER CONTENT AVERAGE
	MISSOURI RIVER BASIN						
BEAVERHEAD RIVER							
13D10	Bloody Dick	7600	2/26	44	13.2	10.0	9.2
12E03	Camp Creek	6800	2/26	81	21.4	9.0	7.8
12D04	Carter Creek	7400	3/1	27	5.3	3.6	3.8*
13E22	Dad Creek Lake	8400	2/27	53	16.0	12.2	9.7*
13D15	Elk Horn Springs	7800	2/27	44	12.5	9.1	8.4
13D09	Gold Stone	8100	2/26	52	16.4	14.2	12.2
11E12	Kilgore	6200	2/27	65	19.4	10.5	8.3
11E04	Lakeview Canyon	6930	3/3	78	23.1	11.9	9.7
11E03	Lakeview Ridge	7400	3/3	74	23.9	9.9	8.5
13E01	Lemhi Pass	7480	2/27	40	11.1	9.8	6.9
13E23	Lemhi Ridge	8100	2/27	39	10.7	9.2	-
11E32	Sawtelle Mountain	8715	2/26	140	47.1	27.1	-
13E02	Trail Creek	7090	2/27	39	10.6	8.0	6.3
12E01	White Pine Ridge	8850	2/27	27	5.4	6.4	4.0
RUBY RIVER							
11D14	Branham Lakes	8850	2/27	81	31.2	29.6	-
11D08	Clover Meadow	8600	2/27	58	17.7	18.6	12.5*
12E07	Divide	7900	2/27	56	15.0	9.0	8.2*
11D15	Middle Mill Creek	7850	2/27	54	18.6	15.0	-
12E06	Notch	8500	2/27	60	17.6	15.1	10.8*
12D05	Smuggler Mine	6960	2/27	40	11.8	9.4	-
BIG HOLE RIVER							
13D20	Abundance Lake	8800	2/27	61	21.4	18.8	15.9*
13D19	Darkhorse Lake	8600	2/27	75	28.3	25.2	22.5*
13D21	Foolhen	8280	2/27	58	19.8	18.6	14.5*
13D24	Slag-A-Melt Lake	8750	2/27	77	29.2	22.0	-
JEFFERSON RIVER							
12C07	Berry Meadow	7300	2/28	35	10.0	7.6	6.7*
12C09	Copper Mountain	7700	2/27	43	11.9	11.4	-
12C10	Nez Perce Creek	6500	2/27	29	7.2	6.7	-
12C06	Picnic Grounds	6500	2/28	23	5.5	4.4	4.0
12D01	Pipestone Pass	7200	2/24	26	5.9	4.6	4.3
12C11	Rocker Peak	8000	3/3	48	15.7	15.1	-
12C11	Rocker Peak Pillow	8000	3/3	SP	14.3	14.5	-
12C12	Uncle Sam Gulch	6500	3/3	31	8.7	8.6	-

SP - Snow pillow observation - water content only.

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SNOW SURVEY DATA

AS OF MARCH 1, 1969

(Inches)

SNOW COURSE			CURRENT DATA			PAST RECORD	
						WATER CONTENT	
NO.	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE
MADISON RIVER							
11E09	Big Springs	6500	2/26	85	26.0	16.8	17.9
11E18	Black Canyon	7850	3/1	113	40.2	24.8	28.5*
11E19	Black Moose	8125	3/1	128	48.0	28.6	34.0*
11D07	Call Road	8050	2/27	40	10.0	11.4	8.4*
11D12	Four Mile	6900	2/25	37	10.0	7.9	6.6*
11E05	Hebgen Dam	6550	3/1	52	13.9	13.8	10.0
11E10	Island Park	6315	2/26	77	23.5	12.9	13.9
11D05	Jack Creek	7500	2/24	22	5.0	6.4	4.8*
11E22	Lake Creek	6100	2/26	45	11.4	8.2	-
11E16	Latham Springs	7650	3/1	107	36.8	24.4	27.8*
11E28	Lion Mountain	8760	2/24	86	27.8	16.8	-
11D11	Lower Twin	7900	2/25	64	21.6	20.8	15.6*
11E14	Lucky Dog	6900	2/28	93	30.0	20.2	21.1*
11E31	Madison Plateau	7750	2/24	89	28.8	17.1	-
11E31	Madison Plateau Pillow	7750	2/24	SP	29.7	16.4	-
11E23	Meridian Creek	7000	2/27	58	16.8	8.8	-
10E02	Norris Basin	7500	3/1	43	12.0	9.2	9.2*
11D03	North Meadow	7500	2/25	38	10.0	7.2	6.2*
11E15	Old Road	7250	3/1	102	35.8	20.2	24.3*
11E17	Poacher's Cabin	8000	3/1	107	39.6	24.8	29.0*
11E21	Potomageton Park	7150	2/28	61	19.3	15.8	12.8*
11E20	Sentinel Creek	8300	2/28	91	29.9	24.4	20.3*
11E33	Soap Bogus Divide	7600	2/26	66	22.2	13.5	-
11E24	Tepee Creek	8000	2/27	77	26.6	12.8	-
11E08	Valley View	6500	2/26	83	28.1	16.9	13.3
11E07	West Yellowstone	6700	3/2	55	16.0	10.8	9.8
11E07	West Yellowstone Pillow	6700	2/28	SP	12.4	8.1	-
11E30	Whiskey Creek	6800	2/24	85	26.8	17.3	-
GALLATIN RIVER							
10D14	Arch Falls	7350	2/28	38	11.4	15.0	10.0*
11D09	Bear Basin	8150	2/25	63	20.0	24.9	16.8*
10D15	Bridger Bowl	7250	2/27	64	24.6	32.2	22.5*
10D15	Bridger Bowl Pillow	7250	2/27	SP	23.5	30.6	-
11E29	Carrot Basin	9000	3/3	122	49.4	29.2	-
11E29	Carrot Basin Pillow	9000				23.4	-
10D04	Devil's Slide	8100	2/28	58	19.3	26.4	17.9
10D03	Hood Meadow	6600	2/28	30	8.4	11.3	7.8
10D13	Lick Creek	6860	2/28	31	8.1	11.4	8.7*
10D13	Lick Creek Pillow	6860	2/28	SP	6.2	11.8	-
10D10	Little Park	7400	2/25	52	14.8	19.6	12.6*
10D18	Maynard Creek	6210	2/27	46	16.5	19.8	-
10D18	Maynard Creek Pillow	6210	2/27	SP	10.6	12.6	-
10D01	New World	6700	2/26	32	10.0	13.2	8.6
10D16	Shower Falls	8100	2/28	67	23.8	30.7	20.8*
10D16	Shower Falls Pillow	8100	2/28	SP	18.9	26.3	-
11E06	Twenty-One Mile	7150	3/4	76	24.9	16.3	15.4

*Note: All Averages Based on 1953-67, 15 year period. *Adjusted Average*

SNOW SURVEY DATA

AS OF MARCH 1, 1969

(Inches)

SNOW COURSE			CURRENT DATA			PAST RECORD	
NO.	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH	WATER CONTENT	WATER CONTENT LAST YEAR	WATER CONTENT AVERAGE
MISSOURI RIVER (Main Stem)							
9A02	Bear Paw Ski Area	5200	2/28	22	5.3	7.2	-
11C01	Boulder Mountain	7950	2/25	54	17.9	17.5	13.4*
12C05	Chessman Reservoir	6200	2/27	25	6.7	5.8	3.4
10C09	Deadman Creek	6450	2/27	36	10.4	10.8	-
10C09	Deadman Creek Pillow	6450	2/27	SP	9.4	10.3	-
10C07	Elk Peak	8000	2/26	43	13.3	15.8	13.4*
10C02	Grasshopper	7000	2/26	27	7.4	6.6	4.3
10C01	Kings Hill	7500	2/26	41	11.3	14.0	10.7
9A01	Rocky Boy	4700	2/28	18	4.0	5.3	4.2
9A01	Rocky Boy Pillow	4700	2/28	SP	3.9	4.7	-
12C01	Stemple Pass	6600	2/28	38	11.3	8.9	9.2
12C02	Ten Mile Lower	6600	2/27	35	10.0	8.2	6.0
12C03	Ten Mile Middle	6800	2/26	42	12.7	11.0	8.8
12C04	Ten Mile Upper	8000	2/26	48	15.9	15.1	11.5
SUN-TETON-MARIAS RIVERS							
13A15	Badger Pass	6900				34.0E	31.8*
13A20	Blue Lake	5900				-	-
12B06	Cabin Creek	5200	2/24	31	7.9	6.6	7.0*
12B09	Five-Bull	5700				6.2	5.7*
12A01	Freight Creek	6000				12.0	14.1
12B07	Goat Mountain	7000	2/28	42	12.0	7.8	10.2
12B12	Mount Lockhart	6400	2/20	56	19.3	-	-
12B12	Mount Lockhart Pillow	6400	2/20	SP	15.9	-	-
12B13	Waldron	5600	2/20	34	8.7	-	-
12B13	Waldron Pillow	5600	2/20	SP	10.2	-	-
12B04	Wrong Creek	5700	2/26	45	11.2	11.2	14.3
12B03	Wrong Ridge	6800	2/27	53	16.9	15.7	19.4
JUDITH RIVER							
9C02	Avalanche	7100	2/27	47	15.1	25.0	-
9C01	Crystal Lake	6100	2/27	31	8.2	15.0	11.1
9C03	Rock Creek	5600	2/27	25	6.3	10.4	-
10C06	Spur Park	8000	2/26	56	18.4	20.2	16.5*
10C06	Spur Park Pillow	8000	2/26	SP	17.2	20.3	-
MUSSELSHELL RIVER							
10C15	Daisy Peak	7600	2/19	40	10.6	-	-
10C13	Eagle Creek	7000	2/20	38	11.4	-	-
10C14	Forest Lake	6400	2/20	37	10.9	-	-
10C11	Haymaker	8050	2/18	47	13.1	-	-
10C12	Johnson Park	6450	2/19	32	8.7	-	-

SP - Snow pillow observation - water content only. E - Estimated

*Note: All Averages Based on 1953-67, 15 year period. *Adjusted Average*

SNOW SURVEY DATA

AS OF MARCH 1, 1969

(Inches)

SNOW COURSE			CURRENT DATA			PAST RECORD	
						WATER CONTENT	
NO.	NAME	ELEVATION	DATE OF SURVEY	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE
MILK RIVER							
10AA2	Cress Day B	3450	3/1	13	3.0	0.0	1.5
9AA1	Cypress Park C	4000	2/26	19	5.3	3.8	4.0
10AA1	Elkwater Lake A	4100	2/24	11	2.2	1.6	2.0
7AA1	Val Marie D	2700	2/27	13	2.9	0.0	1.3
ST. MARY RIVER							
13A18	Hudson Bay Divide	5800	2/28	45	16.2	15.2	16.3*
SASKATCHEWAN (BOW) RIVER							
Alb. 1	Bow River	5100	2/26	34	8.0	6.4	-
Alb. 2	Upper Pipestone	5300	2/26	35	7.6	6.4	-
Alb. 6	Mirror Lake	6600	2/27	40	10.9	9.3	-
Alb. 8	Chateau Lawn	5700	2/27	42	10.6	8.0	-
Alb. 10	Mount Eisenhower	5000	2/28	26	5.9	3.3	-
UPPER YELLOWSTONE RIVER							
10C05	Bald Ridge	7500	2/28	34	10.2	11.8	10.1*
9D01	Camp Senia	7890	2/25	21	4.4	7.0	4.8*
10E03	Canyon	7750	2/25	55	18.0	14.7	13.4
9D07	Cooke Station	8150	2/28	58	19.8	18.2	-
10D05	Crevice Mountain	8400	2/27	39	11.0	13.5	7.2
10E06	East Entrance	7000	2/27	35	10.0	6.1	-
9D06	Fisher Creek	9100	2/28	101	38.1	32.0	-
9D06	Fisher Creek Pillow	9100	2/28	SP	33.1	30.4	-
9D05	Grizzly Peak	8400	3/3	32	7.7	15.0	13.1*
10D06	Independence	8000	2/28	56	17.7	18.8	14.1*
10E04	Lake Camp	7850	2/28	46	12.6	6.7	8.2
9E01	Lodgepole	8200	2/28	37	9.9	8.6	8.8*
10E06	Lupine Creek	7300	2/28	41	11.0	10.0	9.3
10D12	Monument Peak	9000	2/28	77	25.2	26.2	20.0*
10D07	Northeast Entrance	7400	2/28	34	9.6	9.0	7.6
10D07	Northeast Entrance Pillow	7350	3/3	SP	9.3	8.8	-
10C03	Porcupine R. S.	6500	2/28	24	6.1	7.6	6.3
10D10	Sacajawea	6550	2/27	44	14.2	16.4	10.8*
10C08	South Fork Shields	8100	2/28	55	19.4	22.6	19.0*
10E05	Sylvan Pass	7100	2/27	45	13.5	10.8	11.6
10E07	Thumb Divide	7900	2/26	79	26.6	16.5	19.0
9D04	Timberline Creek	8850	2/25	40	11.9	19.5	11.5*
9D02	West Rosebud	7500	2/28	39	12.3	-	8.8*
9D08	White Mill	8700	2/28	76	26.9	23.4	-

SP - Snow pillow observation - water content only.

*Note: All Averages Based on 1953-67, 15 year period. *Adjusted Average*

SOIL MOISTURE DATA

AS OF MARCH 1, 1969

(Inches)

SOIL MOISTURE STATION			SOIL PROFILE		CURRENT DATA		PAST RECORD	
NO.	NAME	ELEVATION	DEPTH	FIELD CAPACITY	DATE OF SURVEY	SOIL MOISTURE	LAST YEAR	**AVERAGE
			COLUMBIA RIVER BASIN					
Kootenai								
15B15M	Baree Trail	3800	48	7.5	2/28	6.3	6.5	-
14A10M	Murphy Lake R. S.	3000	48	22.6	3/3	19.1	21.1	-
15A02M	Raven R. S.	3050	48	23.0	3/3	18.9	19.8	-
Flathead								
13A02M	Desert Mountain	5600	54	8.4	2/28	8.7	6.6	7.1
13A05M	Marias Pass	5250	54	6.5	3/1	5.4	5.6	5.3
Clark Fork								
13C13M	Black Pine	7100	48	10.0	2/25	7.6	8.1	-
13B19M	Seeley Lake R. S.	4030	48	11.9			10.3	-
13C03M	Skalkaho Summit	7260	48	10.8	2/27	7.5	9.9	-
Bitterroot								
13D18M	Gibbons Pass	7100	48	7.1	2/28	5.8	5.5	5.3
14C05M	Lolo Pass	5250	48	10.6	2/28	6.2	10.0	6.5
			MISSOURI RIVER BASIN					
Beaverhead								
11E13M	Lakeview	6700	48	15.3			5.1	7.9
Madison								
11D04M	Red Bluff	4800	40	4.7			2.4	2.3
11E07M	West Yellowstone	6700	48	6.5	2/28	2.8	2.2	-
Gallatin								
10D15M	Bridger Bowl	7250	48	17.0	2/27	16.7	16.0	-
11D02M	College Site	4856	54	14.5	3/4	13.0	12.9	10.2
10D13M	Lick Creek	6860	48	18.8	2/28	17.0	18.0	-
11E06M	Twenty-One Mile	7150	48	10.0	2/28	6.7	3.1	2.8
Missouri River Basin								
10C01M	Kings Hill	7420	48	11.8	2/27	6.8	6.2	7.1
12C08M	Stemple Pass	6350	48	5.9	2/28	4.2	4.3	4.1
Yellowstone								
10D11M	Battle Ridge	6020	48	17.6	2/27	14.1	14.6	13.2
10D07M	Northeast Entrance	7350	48	9.4	3/3	7.5	5.0	6.2

**AVERAGE FOR PERIOD OF RECORD

RESERVOIR STORAGE DATA

AS OF FEBRUARY 28, 1969

(1000 Acre Feet)

BASIN	RESERVOIR	USEABLE CAPACITY	USEABLE STORAGE THIS YEAR	USEABLE STORAGE LAST YEAR	USEABLE STORAGE AVERAGE
COLUMBIA RIVER BASIN					
Flathead	Hungry Horse	3,428.0	2,508.0	2,097.0	2,269.0**
	Flathead Lake	1,791.0	1,010.0	1,087.0	963.0
	Camas (Sum of 4)	45.2	14.4	23.5	28.6
	Mission Valley (Sum of 8)	100.3	76.8	26.5	32.7
Clark Fork	Georgetown Lake	31.0	27.3	26.8	23.6
	Nevada Creek	12.6		7.3	5.1
	Noxon Rapids	334.6	296.9	322.7	293.4**
Bitterroot	Como	34.9	18.4	18.2	11.6
	Painted Rocks	31.7	26.0	22.1	20.9
MISSOURI RIVER BASIN					
Beaverhead	Clark Canyon	328.9	152.4	158.5	129.5**
	Lima	84.0	44.5	42.5	22.9
Ruby	Ruby	38.8	31.5	27.2	26.5
Madison	Hebgen Lake	377.5	299.5	237.0	170.7
	Ennis Lake	41.0	34.5	35.7	37.7
Gallatin	Middle Creek	8.0	3.8	3.3	3.6
Missouri	Canyon Ferry	2,043.0	1,586.0	1,663.0	1,562.0**
	Hauser & Helena	61.9	61.3	71.5	57.1
	Lake Helena	10.4	10.2	10.2	8.8
	Holter Lake	81.9	20.1	80.3	54.3
	Smith River	10.7	8.2	8.9	6.3**
	Durand	7.0	6.3	5.5	4.4
	Martinsdale	23.1	10.5	9.9	6.4
	Deadman's Basin	72.2	46.9	60.2	46.1
	Fort Peck	19,410.0	15,970.0	15,970.0	10,900.0
Sun	Gibson	105.0	62.4	35.1	49.4
	Willow Creek	32.2	21.5	12.2	20.8
	Pishkun	32.0	17.2	16.6	17.7
Marias	Lower Two Medicine	16.6		-	0.0
	Four Horns	19.2		-	12.1
	Swift	30.0	24.2	12.7	19.7
	Lake Frances	112.0	79.4	70.7	83.5
	Tiber	1,313.0	447.8	431.5	628.0**
Milk	Fresno	127.2	82.1	67.9	59.4
	Nelson	66.8	44.0	39.6	41.0
	Lake Sherburne	66.1	26.9	27.8	20.6
Yellowstone	Mystic Lake	20.8	8.9	10.4	7.7
	Tongue River	68.0		50.7	22.8
	Cooney	27.5	18.6	13.3	14.3
Big Horn	Yellowtail	1,356.0	719.7	773.6	-

*Note: All Averages Based on 1953-67, 15 year period. **Average for Period of Record*

Agencies and Organizations Cooperating in Montana Snow Surveys

U. S. Forest Service
Region 1, Missoula, Montana
Montana Forests and Ranger Districts

U. S. Geological Survey
Helena, Montana
Portland, Oregon

U. S. Army Corps of Engineers
Portland, Oregon
Seattle, Washington
Walla Walla, Washington
Omaha, Nebraska

U. S. Indian Irrigation Service
St. Ignatius, Montana

U. S. Weather Bureau
Helena, Montana
Portland, Oregon
Kansas City, Missouri

U. S. Bureau of Sports Fisheries and Wildlife
Red Rock Lakes Refuge
Monida, Montana

U. S. Bureau of Reclamation
Billings, Montana
Boise, Idaho

U. S. Bonneville Power Administration
Portland, Oregon

U. S. Soil Conservation Service
Montana, Wyoming, Idaho

Soil and Water Conservation Districts
Montana Counties

U. S. National Park Service
Yellowstone National Park
Glacier National Park

Montana Power Company
Butte, Montana

Montana Water Resources Board
Helena, Montana

North Montana Branch Station
Agricultural Experiment Station
Havre, Montana

Montana State University
Agricultural Experiment Station
Bozeman, Montana

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Victoria, British Columbia

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